

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 - 20 (cancelled)

21. (New) A dermal tissue nanografting system comprising:
- a tissue particle harvester assembly including:
    - a housing with a port;
    - a rotatable shaft;
    - a tissue cutting tool mounted on the rotatable shaft,
      - wherein the tissue cutting tool is received within an opening in the housing; and
    - an electric motor coupled to the rotatable shaft, wherein the tissue cutting tool is configured to rotate within the opening when the electric motor is operated;
  - a tissue particle collector;
  - a nanograft cell; and
  - a particle retriever, wherein the particle retriever is configured to be received by the port and to inject tissue into the nanograft cell.
22. (New) The dermal tissue nanografting system of claim 21 wherein the housing comprises a tissue opening configured to serve as an orifice for pressing against and receiving a dermal tissue layer of a tissue source.

23. (New) The dermal tissue nanografting system of claim 22 wherein the cutting tool is configured to extend through the tissue opening and penetrate into a tissue surface during use.
24. (New) The dermal tissue nanografting system of claim 23 wherein the cutting tool is configured extend into the tissue surface from approximately 0.01 mm to approximately 0.9 mm.
25. (New) The dermal tissue nanografting system of claim 21 wherein the tissue particle retriever is a syringe.
26. (New) The dermal tissue nanografting system of claim 21 wherein the cutting tool is configured as a rotary drum.
27. (New) The dermal tissue nanografting system of claim 26 wherein:  
the cutting tool comprises a slot extending along the rotary  
drum;  
the slot is parallel to the rotatable shaft;  
a plurality of sharpened cutting elements are inserted into the  
slot.
28. (New) The dermal tissue nanografting system of claim 27 wherein the plurality of sharpened cutting elements form a serrated blade.
29. (New) The dermal tissue nanografting system of claim 21 wherein the cutting tool is an end mill type cutting tool.
30. (New) The dermal tissue nanografting system of claim 29 wherein the cutting tool comprises a tapered cylinder.

31. (New) The dermal tissue nanografting system of claim 21 wherein the port is a luer fitting.
32. (New) A tissue particle harvester assembly comprising:  
a housing including an internal flushing container;  
a port in the housing;  
a cap configured to fit over the internal flushing container;  
a rotatable shaft;  
a tissue cutting tool mounted on the rotatable shaft, wherein  
the tissue cutting tool is received within an opening in  
the housing; and  
an electric motor coupled to the rotatable shaft.
33. (New) The tissue particle harvester assembly of claim 32 wherein the port is configured to receive an injection of fluid.
34. (New) The tissue particle harvester assembly of claim 33 wherein the fluid suspends a plurality of tissue particles within the flushing container during use.
35. (New) The tissue particle harvester assembly of claim 32 wherein the port is a luer fitting.
36. (New) A tissue particle harvester assembly comprising:  
a housing;  
a tissue cutting tool received within the housing; and  
an electric motor coupled to the tissue cutting tool, where:  
the tissue cutting tool comprises:  
a cylindrical body including a first end, a second end, and a  
cutting surface between the first and second end;

a shaft extending through the center of the first end and the second end;  
a slot formed in the first end and extending into the cutting surface;  
a cutting feature inserted into the slot.

37. (New) The tissue particle harvester assembly of claim 36 wherein the slot comprises an "L"-shaped portion when viewed from the first end.
38. (New) The tissue particle harvester assembly of claim 36 wherein the cutting feature is a plurality of sharpened fingers.
39. (New) The tissue particle harvester assembly of claim 36 wherein the tissue cutting tool comprises internal channels configured to flush tissue particles away from the cutting surface during use.
40. (New) The tissue particle harvester assembly of claim 36 wherein the tissue cutting tool comprises an internal core configured to remain stationary when the cutting surface is rotated.